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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/523,467	03/10/2000	David Masao Atoji	RAL9-99-0157	5010

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IBM CORPORATION  
PO BOX 12195  
DEPT 9CCA, BLDG 002  
RESEARCH TRIANGLE PARK, NC 27709

EXAMINER

YAO, KWANG BIN

ART UNIT	PAPER NUMBER
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2664

4

DATE MAILED: 07/01/2003

Please find below and/or attached an Office communication concerning this application or proceeding.

<b>Office Action Summary</b>	<b>Application No.</b> 09/523,467	<b>Applicant(s)</b> ATOJI, DAVID MASAO	
	<b>Examiner</b> Kwang B. Yao	<b>Art Unit</b> 2664	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

**Period for Reply**

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133).
- Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

**Status**

- 1) ☒ Responsive to communication(s) filed on 10 March 2000.
- 2a) ☐ This action is **FINAL**.                      2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

**Disposition of Claims**

- 4) ☒ Claim(s) 1-15 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 1-15 is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_\_ is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

**Application Papers**

- 9) ☒ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on \_\_\_\_\_ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
- Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
- 11) ☐ The proposed drawing correction filed on \_\_\_\_\_ is: a) ☐ approved b) ☐ disapproved by the Examiner.
- If approved, corrected drawings are required in reply to this Office action.
- 12) ☐ The oath or declaration is objected to by the Examiner.

**Priority under 35 U.S.C. §§ 119 and 120**

- 13) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All   b) ☐ Some \* c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- \* See the attached detailed Office action for a list of the certified copies not received.
- 14) ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. § 119(e) (to a provisional application).
- a) ☐ The translation of the foreign language provisional application has been received.
- 15) ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. §§ 120 and/or 121.

**Attachment(s)**

- |  |   |
|--|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892)                                  | 4) <input type="checkbox"/> Interview Summary (PTO-413) Paper No(s). _____  |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948)                         | 5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152) |
| 3) <input checked="" type="checkbox"/> Information Disclosure Statement(s) (PTO-1449) Paper No(s) <u>2</u> . | 6) <input type="checkbox"/> Other: _____                                    |

## **DETAILED ACTION**

### ***Specification***

1. The abstract of the disclosure is objected to because it should be in narrative form and generally limited to a single paragraph on a separate sheet within the range of 50 to 150 words. Correction is required. See MPEP § 608.01(b).

2. The disclosure is objected to because of the following informalities: on page 1, the related application serial number is missing.

Appropriate correction is required.

### ***Claim Rejections - 35 USC § 102***

3. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

4. Claims 1-15 are rejected under 35 U.S.C. 102(b) as being anticipated by Hedlund (US 5,136,584).

Hedlund discloses a system comprising the following features: regarding claim 1, as depicted in Fig. 5, a bus connected to an external interface (219) to request and receive acknowledgment of segmenting information availability; a first input data bus connected to the storage control block (417) to read the segmenting information; a second input data bus connected to the storage unit (404) to read the variable length data packet; a multiplexer (418)

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having two the input data buses and an output bus; a counter pointing (407) to the next address in the word of the packet to be read in the storage unit (404); a finite state machine (416), for each cell to be built, requesting and receiving acknowledgment of segmenting information availability, repetitively activating the multiplexer (418) with storage unit data and segmenting information data according to a finite cell pattern and sending cell data on the output bus to the cell output (204) while incrementing the counter (407) until the output cell is output; the finite state machine (416) repetitively outputting cells according to the cell pattern until all the packet words are read. See column 5-10.

Regarding claim 2, Hedlund discloses the following features: two buses connected to a storage unit controller (206, 405) controlling the storage unit (404), one bus being connected to the counter (407) and sending the address to read in the storage unit and one bus connected to the finite state machine (416) to send request for data, availability on the multiplexer (48) first input bus reading and to receive acknowledgment for storage unit data availability on the multiplexer (48) first input bus. See column 5-10.

Regarding claim 3, Hedlund discloses the following features: as depicted in Figs. 2 and 3, wherein the control block comprises the packet header and the cell header having respectively 6 unit and 10 unit length, the finite state machine activating the multiplexer with the headers and storage unit data to build the cells according to the cell pattern. See column 5-10.

Regarding claim 4, Hedlund discloses the following features: as depicted in Fig. 2, the control block comprises a data field having an even length to be replaced in the packet so that the finite state machine activates the multiplexer with the data field and storage unit data to build the cells with the replaced field according to the cell pattern. See column 5-10.

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Regarding claim 5, Hedlund discloses the following features: as depicted in Fig. 2, the control block comprises a data field having an even length to be inserted in the packet, so that the finite state machine activates the multiplexer with the data field and storage unit data to build the cells with the inserted field according to a cell pattern with a different cell order than the cell pattern used when no data field is inserted in the packet. See column 5-10.

Regarding claim 6, Hedlund discloses the following features: in Fig. 5, wherein the counter (407) is read from the segmenting information at each new cell and incremented by the finite state machine (416), modulo the storage unit word length, of the length of the cell data sent on the output bus. See column 5-10.

Regarding claim 7, Hedlund discloses the following features: wherein the storage unit word length is 16 bytes, the multiplexer output bus is a 4 byte bus and the cell fixed length is 64 bytes, the output cell being filled by 16 clock cycles sequencing the finite state machine, with 4 bytes at each clock cycle. See column 5-10.

Claims 8-15 discloses the similar limitations as claims 1-7. Therefore, claims 8-15 are rejected by the same reasons above.

### ***Conclusion***

5. The prior art made of record and not relied upon is considered pertinent to applicant's disclosure.

Galand et al. (US 6,317,433) discloses a method for optimizing transmission link bandwidth.

Aybay (US 6,052,368) discloses a method for forwarding variable length packets.

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Murakami et al. (US 5,768,274) discloses a cell multiplexer.

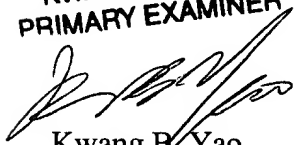
Nishino et al. (US 5,375,121) discloses an ATM cell assembling and disassembling method.

6. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Kwang B. Yao whose telephone number is 703-308-7583. The examiner can normally be reached on M-F.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Wellington Chin can be reached on 703-305-4366. The fax phone numbers for the organization where this application or proceeding is assigned are 703-872-9314 for regular communications and 703-872-9314 for After Final communications.

Any inquiry of a general nature or relating to the status of this application or proceeding should be directed to the receptionist whose telephone number is 703-305-3900.

**KWANG BIN YAO**  
**PRIMARY EXAMINER**



Kwang B. Yao  
June 20, 2003